Major Offered Through:

Umpqua Community College

Microbiology

Microbiologists study the diverse properties and roles of microbes with respect to human and environmental health. These organisms include bacteria, archaea, phytoplankton, zooplankton, parasites and fungi, and viruses. The major consists of a comprehensive core with a strong biological and physical science foundation combined with select fundamental courses in microbiology, followed by the completing of a number of upper division microbiology courses selected by each student based on their specific interests. Microbiology graduates go on to careers in basic research, health professions, industry, agriculture and the environment, and food science.

Microbiology Options

*not required
- Aquatic Microbiology
- Pre-Medicine

Your Bachelor’s Degree (BS) in the College of Science

- A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
- A maximum of 124 credits earned at a community college may be applied toward a bachelor’s degree at OSU.
- Only courses with letter prefixes and numbers above 100 can be accepted.
- Some courses can count towards your major and the Baccalaureate Core. Check with your advisor.
- Options available. See “Important Notes”.
- See the OSU Catalog for a list of courses required for your major and option: catalog.oregonstate.edu

Courses for this Major (offered at Umpqua Community College)

*Priority courses to complete before transferring are distinguished by $^P$

<table>
<thead>
<tr>
<th>Requirement</th>
<th>UCC Course</th>
<th>OSU Courses for Microbiology Majors</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Mathematics $^P$</td>
<td>MTH 111, MTH 112, MTH 251, MTH 252</td>
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<td>Math placement determines where students begin in math. Please speak to your UCC advisor.</td>
</tr>
<tr>
<td>General Chemistry $^P$</td>
<td>CH 221, 222, 223</td>
<td>CH 231/261, 232/262, 233/263</td>
<td>Lecture &amp; lab for Chemistry have separate course numbers at OSU</td>
</tr>
<tr>
<td>Principles of Biology</td>
<td>BI 211, 212, 213</td>
<td>BI 211, 212, 213</td>
<td>Student should take entire series at either UCC or OSU. <strong>Individual terms do not match between the two schools.</strong></td>
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<tr>
<td>Physics</td>
<td>PH 201, 202, 203</td>
<td>PH 201, 202, 203</td>
<td></td>
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<tr>
<td>Organic Chemistry</td>
<td>CH 241, 242, 243</td>
<td>CH 331, 332, 337</td>
<td>Must pass the ACS organic exam offered as part of UCC course to receive upper division credit: <a href="https://chemistry.oregonstate.edu/content/organic-chemistry-transfer-policies">https://chemistry.oregonstate.edu/content/organic-chemistry-transfer-policies</a></td>
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</tbody>
</table>
## Important Notes & Resources

### Important Notes for the College and Major:
- Grade requirements: C- or better in all lower division math, biology, and chemistry coursework
- See a sample degree plan by searching “Microbiology” at [admissions.oregonstate.edu/find-your-major](http://admissions.oregonstate.edu/find-your-major)
- Options are not required but interested students can select from: Aquatic Microbiology and Pre-Medicine
- Other similar majors to explore: BioHealth Sciences, Biology, Biochemistry & Molecular Biology, Biochemistry & Biophysics, and Zoology.
- Math, Chemistry and some Baccalaureate Core are priority courses to complete before transferring to OSU.
- For Microbiology students, the best time to transfer is fall term, particularly due to the required three term science series courses. Talk with the College of Science Transfer Advisor about your specific timeline.
- It is important to speak with the College of Science Transfer Advisor early on, and often, to ensure correct course selection and sequencing.

### Resources and OSU Information:
- Students do not have to complete a transfer degree in order to transfer to OSU.
  - If you've completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See admissions info: [oregonstate.edu/admissions/transfer.html](http://oregonstate.edu/admissions/transfer.html)
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: [partnerships.oregonstate.edu/students](http://partnerships.oregonstate.edu/students)
- Visit OSU for a campus tour and meet with an advisor; schedule your visit at [visitosu.oregonstate.edu/visit-campus](http://visitosu.oregonstate.edu/visit-campus)

## General Education Courses (called the Baccalaureate Core)

### SKILLS COURSES
- **Math**
- **Writing I**
- **Writing II**
- **Speech**
- **Fitness**
  - Completed as part of major.
  - WR 121. Required to transfer.
  - Many options, see BaccCore link above
  - Many options, see BaccCore link above
  - PE 231

### PERSPECTIVE COURSES
- **Biological Science**
- **Physical Science**
- **Additional Biological or Physical Science**
- **Cultural Diversity**
- **Literature and the Arts**
- **Social Processes and Institutions**
- **Western Culture**
  - Completed as part of major
  - Completed as part of major
  - Completed as part of major
  - Many options, see BaccCore link above
  - Many options, see BaccCore link above
  - Many options, see BaccCore link above
  - Many options, see BaccCore link above

### DPD COURSE
- **Difference, Power, & Discrimination**
  - Many options, see BaccCore link above

### SYNTHESIS COURSES
- **Contemporary Global Issues**
- **Science, Technology, & Society**
  - Upper division course, take through OSU
  - Upper division course, take through OSU

It is important to speak with the College of Science Transfer Advisor early on, and often, to ensure correct course selection and sequencing.

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. See your community college advisor first and use this Transfer Guide to help you plan. Also, consider visiting OSU to take a campus tour and meet with an advisor. See [visitosu.oregonstate.edu/visit-campus](http://visitosu.oregonstate.edu/visit-campus) to schedule your personalized visit.

## Advising Contacts & Resources

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<thead>
<tr>
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<tbody>
<tr>
<td>Umpqua Community College</td>
<td><a href="http://www.umpqua.edu/advising-career">http://www.umpqua.edu/advising-career</a></td>
</tr>
<tr>
<td>OSU College of Science Transfer Advisor</td>
<td>Melissa Lee, <a href="mailto:Melissa.Lee@oregonstate.edu">Melissa.Lee@oregonstate.edu</a>, 541-737-3522</td>
</tr>
<tr>
<td>OSU Science Success Center</td>
<td><a href="mailto:sciencesuccess@oregonstate.edu">sciencesuccess@oregonstate.edu</a>, 541-737-3854</td>
</tr>
<tr>
<td>OSU Microbiology Website</td>
<td><a href="https://microbiology.science.oregonstate.edu">https://microbiology.science.oregonstate.edu</a></td>
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